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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
COOKE, COLLEEN P	

ART UNIT	PAPER NUMBER
1725	

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,389	ZHAO, RUPENG	
	Examiner	Art Unit	
	Colleen P Cooke	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-6 and 13-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-6 and 13-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/661,252.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5, 6, 13, and 16-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, and 6-9, of U.S. Patent No. 6,600,939.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following.

Claim 1 is not patentably distinct over claim 3 because claim 3 includes additional limitations not found in instant claim 1. Claim 1 however, uses "comprising" language and therefore is open to the additional limitations found in claim 3. Instant claim 1 is anticipated by claim 3 of the patent.

Claim 5 is not patentably distinct over claim 3 because claim 3 includes additional limitations not found in instant claim 1. Claim 1 however, uses "comprising" language and therefore is open to the additional limitations found in claim 3. Instant claim 1 is anticipated by claim 3 of the patent.

Claim 6 differs from the patented claims because no single patented claim contains all of the limitations found in instant claim 6. Claim 6 is not patentably distinct over the patented claims because it would have been obvious to combine the features of patented claims 3 and 6 because the patent clearly envisions the claimed articles to have said features. It is noted that the patented claims use "comprising" language and therefore are open to additional features such as those claimed in other dependent claims.

Claim 13 is not patentably distinct over claim 3 because claim 3 includes additional limitations not found in instant claim 1. Claim 1 however, uses "comprising" language and therefore is open to the additional limitations found in claim 3. Instant claim 1 is anticipated by claim 3 of the patent.

Claim 16 differs from the patented claims because no single patented claim contains all of the limitations found in instant claim1 6. Claim 16 is not patentably distinct over the patented claims because it would have been obvious to combine the features of patented claims 3 and any one of claims 4, 5 or 8 because the patent clearly envisions the claimed articles to have said features. It is noted that the patented claims use "comprising" language and therefore are open to additional features such as those claimed in other dependent claims.

Claim 17 is not patentably distinct over claim 3 because claim 3 includes additional limitations not found in instant claim 1. Claim 1 however, uses "comprising" language and therefore is open to the additional limitations found in claim 3. Instant claim 1 is anticipated by claim 3 of the patent.

Claim 18 is not patentably distinct over claim 3 because claim 3 includes additional limitations not found in instant claim 1. Claim 1 however, uses "comprising" language and

therefore is open to the additional limitations found in claim 3. Instant claim 1 is anticipated by claim 3 of the patent.

Claim 19 differs from the patented claims because no single patented claim contains all of the limitations found in instant claim 19. Claim 19 is not patentably distinct over the patented claims because it would have been obvious to combine the features of patented claims 3 and 6 because the patent clearly envisions the claimed articles to have said features. It is noted that the patented claims use "comprising" language and therefore are open to additional features such as those claimed in other dependent claims.

Claim 20 differs from the patented claims because no single patented claim contains all of the limitations found in instant claim 20. Claim 20 is not patentably distinct over the patented claims because the process limitation of diffusion bonding the metal tape does not further limit the final article, which is believed to be substantially the same.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-6, and 13-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gamble et al. (5801124).

Regarding claims 1, 4, 6, 13, 19, and 20, Gamble et al. teaches a composite superconducting tape (see Figures 1 and 4) which has at least two parallel stacks of superconducting tapes (13 and 44 respectively) and a metal tape bonded to the stacks (15 and 45 respectively), where the metal tape may be a silver tape of 0.1mm thickness (see Example 2, Column 11, lines 56-58). Although Gamble et al. teaches that the tapes may be made by any process (Column 9, line 37) and that the metal tape is mechanically coupled (Column 6, lines 50-51), Gamble et al. does not teach that the composite is made by diffusion bonding. This process limitation does not appear to patentably distinguish the product as claimed over the product of Gamble et al. and so they are believed to be substantially the same.

Regarding claims 5 and 16-18, Gamble et al. teaches the above and further (in Figure 4) that in addition to a first metal tape (45), there may also be a second metal tape (not numbered) bonded to the opposing surface of the superconducting tapes (41). Gamble et al. teaches that the two metal tapes are selected so as to produce a neutral axis of the composite tape displaced according to the relative thickness and elastic modulus and also to have a particular yield stress (Column 8, lines 43-64). Gamble et al. further describes the selection of tape materials with respect to several mechanical properties, including the tensile strain of the metal tape which is a function of the tensile strength of the tape (Column 9, lines 39-64). It would be obvious that tapes having different elastic moduli would be different materials and thus have different strengths that would achieve the displaced neutral axis that Gamble et al. is trying to achieve.

Regarding claims 14 and 15, Gamble et al. teaches the above with respect to claim 13 and further that the superconducting filaments (13 in Figure 1) are in a metal matrix (12 in Figure 1). Gable et al. also teaches that the metal is most desirably silver or a silver alloy (Column 4, lines 46-48 and 60-61) and that the metal tape may be a silver tape of 0.1mm thickness (see Example 2, Column 11, lines 56-58).

Claims 1, 6, 13, 14, 16, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Scudiere et al. (6444917).

Scudiere et al. teaches (see Figure 1a and 4) a composite superconducting tape including a plurality of co-extending superconducting tapes (12) are stacked in parallel stacks, a first metal tape (16a) is bonded to the surface, and a second metal tape (16b) bonded to the opposing surface. Scudiere et al. further teaches that each tape (12) consists of filaments (42) and a matrix (40) where the matrix is preferably silver or silver-based (Column 5, lines 6-18). Although Scudiere et al. does not teach that the composite is made by diffusion bonding, this process limitation does not appear to patentably distinguish the product as claimed over the product of Scudiere et al. and they are believed to be substantially the same.

Conclusion

Any inquiry concerning this or earlier communications from the examiner should be directed to Colleen Cooke, whose telephone number is 703-305-1136. She can normally be reached Monday-Thursday from 7:15-5:45pm.

If attempts to reach the examiner by telephone are unsuccessful, her supervisor, Thomas Dunn, can be reached at 703-308-3318. The official fax number for the organization where this application or proceeding is assigned is 703-872-9306. The unofficial fax number for this examiner is 703-746-3048.

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is 703-308-0661.

Colleen P. Cooke

Colleen P Cooke
Examiner
Art Unit 1725